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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,971	01/31/2001	Eric G. Lang	MS#150411.1/40062.86US01	6285
7590	10/17/2006			EXAMINER VU, THANH T
Homer L. Knearl Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			ART UNIT 2174	PAPER NUMBER

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/773,971	LANG, ERIC G.	
	Examiner Thanh T. Vu	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 33,35,37,39,40,43,45,46,51-61,63 and 64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 33, 35, 37, 39, 40, 43, 45, 46, 51-61, 63 and 64 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

This communication is responsive to Amendment, filed 07/27/2006.

Claims 33, 35, 37, 39, 40, 43, 45, 46, 51-61, 63 and 64 are pending in this application. In the Amendment, claims 33, 35, 37, 43, 51, 53, 54, 55, 60, and 61 were amended and claims 34, 36, 38, 41, 42, 44, 47-50, and 58 were canceled.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33, 35, 37, 39-40, 52, 53, 55-57, 59-61 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaton et al. (“Beaton”, U.S. Pat. No. 6037937), and Eftekhari (Pub. No. 2002/0024505).

Per claim 33, Beaton teaches a method for providing a user interface for an electronic device having a housing that includes a display, the method comprising:

providing an input element on the housing wherein the input element is separate from the display (fig. 3A; keypad 330 with navigational control);  
displaying information in a foreground of the display (figs. 3A and 3B; display 340);

displaying a control image in a background of the display, the control image indicating a task to be performed by the electronic device when the control image is activated (fig. 8; col. 5, lines 19-26 and lines 40-54), and positioning the control image in the background of the display proximate the input element (figs. 3A and 10A-10C; navigational control on keypad 330 is proximate the control image). Beaton does not teach associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image. However, Eftekhari teaches associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image ([0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Eftekhari in the invention of Beaton in order to allow user to easily associating a key of a handheld device with a function displayed on the display screen.

Per claim 35, Beaton and Eftekhari teach the method of claim 33 further comprising:

providing a plurality of input elements on the housing separate from the display (Beaton, fig. 3A; navigational control on keypad 330);

displaying a plurality of control images in the background of the display (Beaton, figs. 9A-9C; col. 40-54); and positioning the control image in the background of the display proximate a separate one of the input elements (Beaton, figs. 3A and 10A-10C; each element of the navigational control on keypad 330 is proximate the control image).

associating each of the control images with a different one of the plurality of input elements (Eftekhari, [0017]).

Per claim 37, Beaton teaches the method of claim 35 further comprising:

defining a plurality of regions within the background of the display, wherein each defined region is positioned proximate to a separate one of the input elements (figs. 3A and 10A-10C; each element of the navigational control on keypad 330 is proximate the control image col. 6, lines 35-43); and

positioning each of the control images within one of the defined regions (fig. 9A-10C; col. 5, lines 40-54).

Per claim 39, Beaton teaches the method of claim 35 wherein each of the input elements comprise a button positioned on the housing (fig. 3A; keypad 330).

Per claim 40, Beaton teaches the method of claim 39 wherein the electronic device comprises a watch (col. 4, lines 10-14).

Per claim 52 and 53, Beaton teaches wherein the electronic device comprises a watch (col. 4, lines 10-14).

Claim 55 is rejected under the same rationale as claim 43.

Per claim 56, Beaton teaches the computer readable medium of claim 55 wherein the computer process further comprises receiving an activation signal from the input element (fig. 4 and 5; col. 6, lines 51-63).

Per claim 57, Beaton teaches the computer readable medium of claim 56 wherein the computer process further comprises performing the task indicated by the control image associated with the input element after the activation signal is received (fig. 4 and 5; col. 6, lines 51-63).

Per claim 59, Beaton teaches wherein the combining operation includes blending the information screen and the control screen such that the control screen appears in front of the information screen (figs 8 and 10A-10C; col. 5, lines 19-26 and col. 6, lines 26-35).

Per claim 60, Beaton and Eftekhari teach the computer process further comprising:  
displaying a plurality of control images in the background of the display (Beaton, figs. 9A-9C; col. 40-54); positioning each of the control images in the control screen proximate to a separate one of the input elements ((figs. 3A and 10A-10C; each element of the navigational control on keypad 330 is proximate the control image col. 6, lines 35-43); and  
associating each of the control images with a different one of the plurality of input elements (Eftekhari, [0017]).

Claim 61 is rejected under the same rationale as claim 37.

Claim 64 is rejected under the same rationale as claim 52.

Claims 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaton et al. (“Beaton”, U.S. Pat. No. 6037937), Eftekhari (Pub. No. 2002/0024505), and Pisutha-Arnond (U.S. Pat. No. 5745116).

Per claim 43, Beaton teaches a method for inputting control signals to an electronic device, the electronic device having a housing and a graphical user interface that includes a display, the method comprising:

providing an input element on the housing wherein the input element is separate from the display (fig. 3A; keypad 330 with navigational control); generating an information screen (fig. 3A and 3B; information screen 340); generating a control screen having at least one control image, the control image indicating a task to be performed by the electronic device when the

control image is activated (figs. 9A-10C; col. 5, lines 19-26, and lines 40-54); combining the information screen and the control screen into a composite screen such that the information screen and the control screen appear in an overlapping fashion (figs. 10A-10C; col.5, lines 19-26; col. 6, lines 25-35); and displaying the composite screen in the display (figs. 10A-10C; col.5, lines 19-26; col. 6, lines 25-35).

Beaton does not teach the input element is one of a joystick, a rocker switch, a rotary dial, or a slide bar, and wherein the input element provides for movement in at least two directions, and associating each of control images with a different directional movement of the input element so that movement of the input element initiates performance of a task indicated by the associated control image. However, Pisutha-Arnond teaches an input element is one of a joystick, a rocker switch, a rotary dial, or a slide bar, and wherein the input element provides for movement in at least two directions (fig. 1; col. 2, lines 63-67). Eftekhari teaches associating the each of control images with a different one of the input elements so that activation of the input element initiates performance of the task indicated by the control image ([0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Pisutha-Arnond and Eftekhari in the invention of Beaton in order to provide user with an alternative and different control mechanism for a user interface and in order to allow user to easily associating a key of a handheld device with a function displayed on the display screen.

Per claim 45, Beaton teaches the method of claim 43 wherein the combining operation includes blending the information screen and the control screen such that the information screen appears in front of the control screen (figs 8 and 10A-10C; col. 5, lines 19-26 and col. 6, lines 26-35).

Per claim 46, Beaton teaches the method of claim 43 wherein the combining operation includes blending the information screen and the control screen such that the control screen appears in front of the information screen (figs 8 and 10A-10C; col. 5, lines 19-26 and col. 6, lines 26-35).

Claim 54 is rejected under the same rationale as claim 37.

Claims 51, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaton et al. ("Beaton", U.S. Pat. No. 6037937), Eftekhari (Pub. No. 2002/0024505), and Hoeksma (U.S. Pat. No. 6,271,835).

Per claim 63, Beaton and Eftekhari teach the computer readable medium of claim 62, but do not teach the computer process further comprises loading a character set, the character set including a plurality of individual characters; dividing the character set into character subsets; representing each of the character subsets as a separate control image in the control screen; receiving an activation signal from one of the input elements representing a selection of one of the character subsets; narrowing a range of the individual characters within the character set to the selected character subset; and repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made.

However, Hoeksman teaches the computer process further comprises loading a character set, the character set including a plurality of individual characters (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); dividing the character set into character subsets (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); representing each of the character subsets as a separate control image in the control screen (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); receiving an activation signal from one of the input elements representing a selection of one of the character subsets;

narrowing a range of the individual characters within the character set to the selected character subset (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); and repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Hoeksma in the invention of Beaton and Eftekhari because it provides users with a clear and intuitive method of data input in an area of limited space.

Claim 51 is rejected under the same rationale as claim 63.

#### ***Response to Arguments***

Applicants' arguments in the Amendment have been fully considered but are not persuasive.

Applicant's primary argument is that Beaton and Eftekhari do not teach positioning the control image in the background of the display proximate the input element to associate the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image.

The examiner does not agree for the following reasons:

During patent examination, the pending claims must be "given >their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

In this case, Beaton teaches positioning the control image in the background of the display proximate the input element (figs. 3A and 10A-10C; navigational control on keypad 330 is proximate the control image). And Eftekhari teaches associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image ([0017]). Accordingly, Beaton and Eftekhari read on the claim language.

Regarding Applicant's argument that Beaton's use of a touch screen display to activate the control images teaches away from the use of soft-keys that (p. 12). Examiner points out that MPEP 2121.04 states:

**NONPREFERRED EMBODIMENTS CONSTITUTE PRIOR ART**

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyester-imide resin instead of epoxy. The reference, however,

disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have "relatively acceptable dimensional stability" and "some degree of flexibility," but are inferior to circuit boards impregnated with polyester-imide resins. The court upheld the rejection concluding that applicant's argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since "Gurley asserted no discovery beyond what was known in the art." 27 F.3d at 554, 31 USPQ2d at 1132.).

Thus, as per MPEP 2121.04, although Beaton discloses the use of soft-key in a non-preferred embodiment, Beaton disclosure is not a teaching away.

*Inquiries*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The examiner can normally be reached on Mon-Thur and every other Fri 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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